

## General

### Title

Prostate cancer: proportion of patients with intermediate risk prostate cancer undergoing radical treatment who have MRI of the prostate.

### Source(s)

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Prostate cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jul. 38 p. [21 references]

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the proportion of patients with intermediate risk prostate cancer undergoing radical treatment who have magnetic resonance imaging (MRI) of the prostate.

This Cancer Quality Performance Indicator (QPI) is separated into two parts. Please refer to the related NQMC measure summary, [Prostate cancer: proportion of patients with high risk prostate cancer undergoing radical treatment who have MRI of the prostate and isotope bone scan \(or alternative whole body MRI evaluation\)](#).

Note from the National Quality Measures Clearinghouse: This measure is part of the Cancer Quality Performance Indicators (QPIs) collection. For more information, including a complete list of QPI measure sets, please visit the [Healthcare Improvement Scotland Web site](#).

## Rationale

Local staging is of importance in helping guide both patient and clinician towards a treatment decision. Whilst digital rectal examination, prostate specific androgen (PSA) level and needle biopsy histology together help predict the likelihood of organ-confined disease, this is on a population rather than individual patient basis. In addition, needle biopsies are prone to sampling error. Therefore the management of a patient predicted to have organ confined disease by the above parameters who unexpectedly on magnetic resonance imaging (MRI) has definite capsular, seminal vesicle, nodal or bony involvement (or a predominant anterior tumour not palpable or reached by biopsy) may be radically changed by that MRI result. Similarly, patients predicted to have significant risk of locally advanced disease may be considered suitable for radical treatment if the MRI shows organ-confined disease. Clearly patients found to have bone metastases are by definition not suitable for radical treatment (Royal College of Radiologists, 2007; Wang et al., 2006; Wang, 2009).

Patients with high-risk prostate cancer should have MRI to assess the extent of disease ahead of radical treatment (National Institute for Health and Care Excellence [NICE], 2014).

For patients with intermediate risk prostate cancer with PSA less than 10 at diagnosis a bone scan is not routinely recommended (NICE, 2014).

## Evidence for Rationale

National Institute for Health and Care Excellence (NICE). Prostate cancer: diagnosis and management. London (UK): National Institute for Health and Care Excellence (NICE); 2014 Jan 8. 45 p. (Clinical guideline; no. 175).

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Prostate cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jul. 38 p. [21 references]

Royal College of Radiologists (RCR). Making the best use of clinical radiology services, sixth edition. London (UK): Royal College of Radiologists (RCR); 2007.

Wang L, Hricak H, Kattan MW, Chen HN, Scardino PT, Kuroiwa K. Prediction of organ-confined prostate cancer: incremental value of MR imaging and MR spectroscopic imaging to staging nomograms. Radiology. 2006 Feb;238(2):597-603. [PubMed](#)

Wang L. Incremental value of magnetic resonance imaging in the advanced management of prostate cancer. World J Radiol. 2009 Dec 31;1(1):3-14. [PubMed](#)

## Primary Health Components

Intermediate risk prostate cancer; radical treatment; magnetic resonance imaging (MRI)

## Denominator Description

All patients with intermediate risk prostate cancer undergoing radical treatment (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Number of patients with intermediate risk prostate cancer undergoing radical treatment who have magnetic resonance imaging (MRI) of the prostate (see the related "Numerator Inclusions/Exclusions" field)

# Evidence Supporting the Measure

## Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

The collection of data is piloted on a small number of patient records using a paper data collection form produced by Information Services Division (ISD). The aim is to identify any anomalies or difficulties with data collection prior to full implementation. At least one NHS board in each Regional Cancer Network participates in the pilot.

## Evidence for Extent of Measure Testing

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p.

# State of Use of the Measure

## State of Use

Current routine use

## Current Use

not defined yet

# Application of the Measure in its Current Use

## Measurement Setting

Ambulatory/Office-based Care

Ambulatory Procedure/Imaging Center

Hospital Outpatient

## Professionals Involved in Delivery of Health Services

not defined yet

## Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

## Statement of Acceptable Minimum Sample Size

Unspecified

## Target Population Age

Unspecified

## Target Population Gender

Male (only)

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Getting Better

Living with Illness

## IOM Domain

Effectiveness

# Data Collection for the Measure

## Case Finding Period

Unspecified

## Denominator Sampling Frame

Patients associated with provider

## Denominator (Index) Event or Characteristic

Clinical Condition

Therapeutic Intervention

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

Inclusions

All patients with intermediate risk prostate cancer undergoing radical treatment

Exclusions

Patients unable to undergo a magnetic resonance imaging (MRI) scan:

Pacemaker or other MRI incompatible implanted device

Cerebral aneurysm clip

Metal in eye

Claustrophobia

Unable to fit bore of scanner

Too heavy for MRI table

Patients who refuse MRI

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

Inclusions

Number of patients with intermediate risk prostate cancer undergoing radical treatment who have magnetic resonance imaging (MRI) of the prostate

Exclusions

Patients unable to undergo an MRI scan:

Pacemaker or other MRI incompatible implanted device

Cerebral aneurysm clip

Metal in eye

Claustrophobia

Unable to fit bore of scanner

Too heavy for MRI table  
Patients who refuse MRI

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Electronic health/medical record

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

### Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

## Prescriptive Standard

Target: 95%

The tolerance within this target is to account for other situations where patients are deemed clinically

unsuitable or unfit to undergo magnetic resonance imaging (MRI). In addition, it reflects those patients in which prostate cancer is an incidental finding at surgery.

## Evidence for Prescriptive Standard

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Prostate cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jul. 38 p. [21 references]

## Identifying Information

### Original Title

QPI 2 (i) – radiological staging.

### Measure Collection Name

Cancer Quality Performance Indicators (QPIs)

### Measure Set Name

Prostate Cancer

### Submitter

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

### Developer

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

### Funding Source(s)

Scottish Government

### Composition of the Group that Developed the Measure

Prostate Cancer QPI Development Group

### Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2016 Jul

## Measure Maintenance

The Cancer Quality Performance Indicators (QPIs) will be kept under regular review and be responsive to changes in clinical practice and emerging evidence. Formal reviews are conducted every 3 years and baseline checks each year.

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

## Measure Availability

Source document available from the [Healthcare Improvement Scotland Web site](#) .

For more information, contact the Healthcare Improvement Scotland at Gyle Square, 1 South Gyle Crescent, Edinburgh, Scotland EH12 9EB; Phone: 0131 623 4300; E-mail: [comments.his@nhs.net](mailto:comments.his@nhs.net); Web site: [www.healthcareimprovementscotland.org/](http://www.healthcareimprovementscotland.org/) .

## Companion Documents

The following is available:

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p. This document is available from the [Healthcare Improvement Scotland Web site](#) .

## NQMC Status

This NQMC summary was completed by ECRI Institute on May 31, 2017.

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## Production

Source(s)



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